NATIONAL PETROLEUM NEWS

JUNE 1992

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SECURITY

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Leak Detection Update

NPN
NATIONAL PETROLEUM NEWS
Established in 1909

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Editor's Viewpoint

It is with deep sadness that I must report the death of J. Richard Shaner, our *NPN* executive editor. Mr. Shaner passed away on April 26 in the Morristown, N.J., Memorial Hospital after an extended illness.

Marvin Reid, former editor-in-chief and an old friend of Dick's, expressed it for all of us on the *NPN* staff. "It's a heck of a loss," Marvin said, emphasizing the loss was both personal and professional. Frank Breese, "Mr. *NPN*" for a quarter century in the '50s, '60s and '70s, knew Dick Shaner for over 40 years. "Dick was from the old school of news reporting—fast, profilic and objective," Frank said. "Dick was a true journeyman newsman, with a great news sense."

Among the hundreds of journalists who cover the petroleum industry beat, Dick Shaner was truly what the French call a *nonpareil* (one-of-a-kind)—a description he would have appreciated, but would have never claimed for himself. His productivity was legendary. "You could throw anything at him" Marvin said. "If there was a late-breaking story, call Dick, and you had it pronto."

I can confirm this personally. It was simply amazing to watch the reams of news copy flowing in over the modem from the computer at Dick Shaner's Whippany, N.J., office. And it was fine copy, too, requiring very little editing or rewrite. It had that Shaner flair and style (and humor) that many of you have come to recognize over the years, with its unique insights and understanding that made sense of often confusing news developments.

Until the day he was admitted to the hospital several months ago, Dick Shaner was digging out news and sending in copy with the energy and gusto of a man half his age, which was 76 when he died.

Dick's work gained recognition from his peers in the industry as well. In the 1970s, he was a key participant in special *NPN* reports that received Jesse H. Neal Awards for outstanding editorial performance. In 1982, Dick was honored with the Milburn Petty Award from the Assn. of Petroleum Writers for outstanding journalistic achievement in covering the petroleum industry.

Dick Shaner had a long and active career in the industry, including stints with the press relations department of the American Petroleum Institute, the old *NPN Bulletin* and other assignments. In 1974, joined the *NPN* staff full time on a contract arrangement. In addition to churning out tons of news copy, Dick took over the production of the *NPN Factbook*. The current status and acceptance of the *Factbook* as the industry's leading data source reflects the hard work and dedication he put into it over the years.

Dick is remembered by all of us for his many fine qualities: his willingness to counsel and guide us; his loyalty; his gentle humor (occassionally with a sharp edge to it); his devotion to his family (wife, Doris, four children, 11 grandchildren and five great-grandchildren) and to his community.

Goodbye Dick, and God bless you.

—Don Smith

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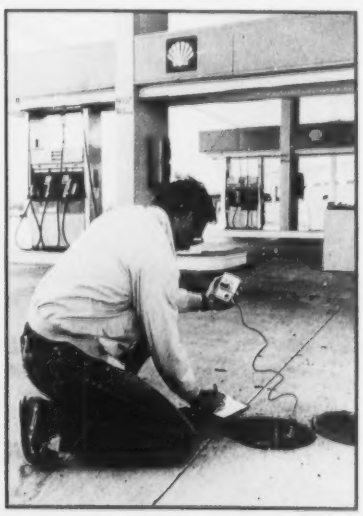

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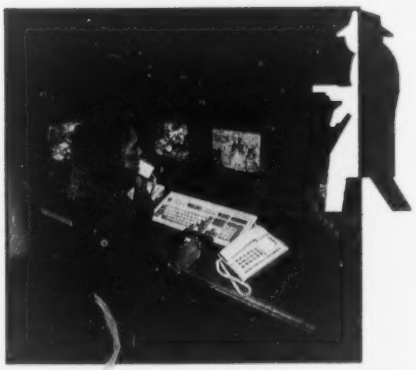

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Majors Report Reduced First-Quarter Earnings

Most of the top corporate officers of the 23 leading U.S. oil companies—and their shareholders as well—would undoubtedly prefer to forget the first quarter of 1992. The earnings performance for the period reported by most of the major companies was bleak when compared to 1991's first quarter. Recession, soft demand and other problems took their toll.

Of the 23 companies, 13 said their earnings were down compared to last year's first quarter. Seven more which reported net losses for the first three months of 1992 had positive earnings in the comparable 1991 period. Only one company, Shell, showed an overall earnings improvement.

Downstream profits, compared to 1991, did not fare too well either. Six of the 10 reporting companies had reduced earnings or net losses when matched against 1991 totals. Just one company, Arco, improved in 1992's first quarter.

Overall, first-quarter 1992 earnings were down by a total of $3.535-billion compared with the total income reported by the companies in 1991.

Corporate Earnings, First-Quarter 1992
(millions of dollars)

	1st-Qtr. 1992	1st-Qtr. 1991	% Change
Exxon	$1,350.0	$2,240.0	(40.0)%
Mobil	127.0	710.0	(82.0)
Chevron	304.0	557.0	(45.4)
Amoco	234.0	803.0	(70.0)
Shell	194.0	125.0	55.2
Texaco	200.0	415.0	(52.0)
Arco	180.0	351.0	(48.7)
BP America	(109.0)	18.0	—
Phillips	(114.0)	107.0**	—
Conoco	118.0	322.0	(63.4)
Marathon	35.0	71.0	(50.7)
Unocal	16.0	75.0	(78.7)
Coastal	22.4	54.3	(58.7)
Amerada Hess	(23.4)	75.7	—
Sun	(21.0)	41.0	—
Pennzoil	(11.7)	(27.7)**	—
Ashland*	(9.0)	26.6	—
Kerr-McGee	8.6	29.7	(71.0)
FINA	(5.5)	8.3	—
Citgo	27.0	41.0	(34.1)
Murphy	23.3	25.6	(9.0)
Total Petroleum	(17.4)	(13.3)**	—
Diamond Shamrock	(10.8)	4.3	—

**Second quarter; fiscal ends 9/30.*
***Revised.*

Downstream, First-Quarter 1992
(millions of dollars)

Exxon (total)	$473.0	$1,353.0	(65.0)%
Domestic	23.0	256.0	(91.0)
Foreign	450.0	1,097.0	(59.0)
Mobil (total)	52.0	442.0	(88.2)
Domestic	(4.0)	100.0	—
Foreign	56.0	342.0	(83.6)
Chevron(total)	61.0	233.0**	(73.8)
Domestic	39.0	99.0	(60.6)
Foreign	22.0	134.0**	(83.6)
Texaco (total)	172.0	271.0	(36.5)
Domestic	80.0	60.0	33.0
Foreign	92.0	211.0	(56.4)
Amoco (worldwide)	65.0	214.0	(69.6)
Shell	(34.0)	4.0	—
Arco	78.0	74.0	5.4
Marathon	44.0	102.0	(56.9)
Sun	(7.0)	38.0	—
Kerr-McGee	(5.3)	3.4	—

Exxon Pulling Out of Southern California

Exxon is withdrawing from southern California, selling as many as it can of its 156 stations there and shutting down the rest. Sold or not, all the brand signs will come down in November in Los Angeles, Orange and Ventura Counties.

An Exxon statement says, "This action was taken as part of an effort to reduce costs and to improve the overall profitability of Exxon's marketing operations. For some time Exxon has been concerned with its western marketing operations due to the inability to generate acceptable profits in some western markets."

Chevron U.S.A. Products Co. announced it is acquiring 23 of Exxon's direct-supplied stations in the pullout area. Terms were not disclosed. Target date for completion of the sale is November, after which the stations will be converted to the Chevron brand. The stations will be supplied by Chevron's Los Angeles-area refinery in El Segundo.

Exxon says it has contracted with or is actively negotiating with other oil companies for the sale of 25-30 other stations in the area. The sale requires the buyer to offer franchises to dealers leasing the stations. Stations not sold will be offered to the dealers leasing the stations.

With its 135,000 b/d refinery at Benicia in the San Francisco Bay area, Exxon still supplies 570 branded stations in northern California, mostly in the San Francisco and Sacramento areas. It also supplies 75 stations in Oregon and 190 in Washington.

Exxon's retrenchment on the West Coast has been going on for some time. It pulled out of San Diego County in 1988 on a trade of 90 stations for 92 Texaco stations in northern California. It is in the process of selling 57 stations in the Seattle area to BP Oil Co.

Arco says it might buy a few stations, but with near saturation in the market, it doesn't want to acquire outlets that would conflict with other Arco stations. A spokesman says many of Exxon's locations are "terrific." Mobil is reportedly interested in some Exxon stations, but declined comment. Unocal and Shell say they aren't interested in any of the Exxon stations in southern California. A Texaco spokesman says the company is not now actively pursuing acquisition of any Exxon assets in the area.

Exxon's pullout isn't expected to affect the gasoline market there greatly because of its small market share. Whitney Leigh Corp., a market research firm, reports Exxon's share earlier this year was 3.6%. Other shares were Arco 28.3%, Chevron 13.2%, Mobil 11.7%, Shell 13.5%, Texaco 4.0%, Unocal 17.5% and nonmajors 8.2%.

• TRENDS

Federal Analysts Look At Oil Prices in 2010

Economists and analysts are brave indeed who try to forecast with any confidence what will happen five years from now, let alone 20. In a way, long-range forecasts aren't worth the paper they're printed on. Yet economists and others are compelled to make them.

Consider the pitiable state of affairs of economists and analysts at the U.S. Energy Information Administration (EIA), who are currently charged with coming up with forecasts out to the year 2010. They can compare their forecasts with those of other groups, such as DRI/McGraw-Hill and the Independent Petroleum Assn. of America (IPAA), but otherwise they're on their own.

It's not a job to envy. The process is all computerized now, of course, but humans must establish databases and design computer models to approximate what can happen, all things considered. Garbage in, garbage out, they say, and there are heaps of detritus to prove it.

To cushion the risks of a forecast, which analysts prefer to call an outlook or a projection, the task is divided into individual computer models, each assigned a job. For example, one computer model EIA relies on is on world oil prices. Another is on economics in general. Each energy source has a model: petroleum, natural gas, coal and electricity. Each end use has a model: residential, commercial, industrial and transportation. There are others. All affect one another. A super model brings them all together.

With all of their possible faults, forecasts made by responsible groups are the best that humans, with the help of ever-more-dazzling computers, have yet been able to devise. They cannot take into consideration the unexpected, but they provide a base for our thinking.

We should, then, be considerate of forecasters who provide a best case, worst case, intermediate case, allowing for a range of conditions. In EIA's 1992 annual energy outlook (AEO92), projections are made for high and low economic growth and high and low crude oil prices. That's four categories, take your pick.

To get to the point, a lot of what EIA projects for 2010 hangs on whether crude oil prices rise to $40.20/bbl., the high-price case, or $22.60/bbl., the low-price case. It's quite a spread, leading to strongly diverging forecasts for petroleum product prices.

Assuming that transportation remains the leading end use of petroleum products throughout the projection period, amounting to more than half of U.S. oil demand in all considered cases, gasoline use will increase to 7.9-million to 9.1-million b/d in 2010, for the high and low price cases respectively, compared with 7.2-million in 1990 (chosen as a base reference). That's an increase of 9.7% (or 0.5% annually, compounded) in the high-price case, or of 26.4% (or 1.2% annually, compounded) in the low-price case.

The real price of motor gasoline, meaning the price after adjusting for inflation, is expected to increase from $1.17/gal. in 1990 to between $1.30 and $1.74/gal. by 2010. These prices include federal and state taxes, but not local taxes. The real price of diesel fuel is expected to increase from $1.18/gal. in 1990 to between $1.27 and $1.69/gal. The real price of home heating oil is projected to change from $0.97/gal. in 1990 to between $0.96 and $1.32/gal. The growth pattern is different for heating oil than for diesel fuel because home fuels are not subject to motor fuel taxes or sulfur limitations, and also because the demand for heating oil is declining, EIA says. Jet fuel prices, about $0.76/gal. in 1990, are projected to range from $0.71 to $1.13/gal.

Motor gasoline's share of transportation demand is projected to decline from 62% in 1990 to between 56% and 58% in 2010. The decline is the result of more jet fuel and diesel fuel being used relative to gasoline. In most cases, diesel fuel is projected to experience the strongest relative increase in demand of any product in the transportation sector, partly because diesel fuel is generally priced below gasoline through 2010, EIA says.

Since the price of crude oil is responsible for the range of projections, all bets are off if something happens to throw reasonable expectations off. *—Mark Emond*

• MARKETPLACE AT A GLANCE

AVERAGE GASOLINE PRICES IN THE U.S. (per gal.)

MARCH	Gasoline (All types)	Leaded Regular	Unleaded Regular	Unleaded Premium
U.S. City Avg.	$1.122	*	$1.058	$1.250
Regions				
Northeast	1.189	*	1.107	1.326
North Central	1.065	*	1.028	1.192
South	1.102	*	1.027	1.215
West	1.159	*	1.108	1.289

** Data no longer collected or available.*
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

STOCKS (Add 000 bbl.)

	5/1/92	5/3/91
Gasoline (Total)	216,378	204,300
Unleaded*	176,455	158,888
Jet Kerosine	35,481	37,541
Distillates	93,327	101,296
Residual	38,433	43,870

**Leaded regular prices no longer collected by Bureau of Labor Statistics.*
Source: American Petroleum Institute.

believe it provides the same benefit, if not better, than the LEV," he explains.

IPMA Elects Beeler President

Charles G. Beeler, president of Shirley Oil & Supply Co., McLean, Ill., was elected president of the Illinois Petroleum Marketers Assn. (IPMA) in late March at IPMA's Stations 'N Stores trade show and convention in Rosemont, Ill. He replaces Arthur Willaredt, will also oversee the Illinois Assn. of Convenience Stores (IACS).

Charles Beeler

Beeler, well-known in the truckstop and oil industries, has served on the board of IPMA/IACS since 1982. He also serves as a board member of America's Best Truckstop and is a former board member of the Illinois Truck Stop Assn.

Beeler wasn't always a petroleum marketer. He used to be a farmer. He once owned and operated a grain and livestock farm from 1950-'68, before deciding to lease out his farm operations. Beeler's Dixie Truckers Home truckstops, located in McLean and Tuscola, Ill., have for years been welcome oases for truckers traveling on Route 66 through the state.

The McLean truckstop predates the famous Route 66, which is commemorating 66th year. It houses the Route 66 Hall of Fame, which includes memorabilia and other notable items from the famous route, which spanned 2,200 miles, across eight states and three time zones.

Supreme Court Rules On Missouri Billboards

Signs advising motorists where to find food, fuel and lodging can be erected along highways in Missouri, the state Supreme Court ruled.

The ruling follows an April 1990 moratorium placed on billboards in Jefferson City and Columbia. The ban affected the state's two interstate highways, I-70 and I-44, and had an impact on commerce.

In Columbia's case, the city council overturned in January 1990 a recommendation by its zoning board that billboards should be spaced out 1,000-ft. In lieu of the spacing requirement, the council issued a stiffer moratorium—banishment.

Missouri petroleum marketers have maintained all along that a ban on billboards would be a death blow to business. Travelers would have a nonselective idea of where the best gasoline stations and restaurants are located.

Billboards, according to a survey sponsored by the Missouri Outdoor Sign Assn., account for 51% of the business done at these establishments on average, and some reported that billboards account for 75% of profits.

Groups like the Sierra Club have regarded billboards as sight pollution that detracts from the scenery along the interstate.

Iowa Marketers Win First Court Battle vs. Casey's

A U.S. district court judge ruled in March that five Iowa petroleum marketers have the right to bring an unfair pricing claim to federal court.

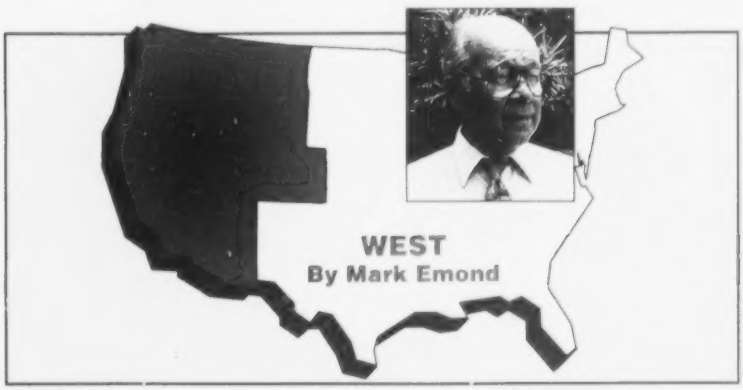
The class-action lawsuit, filed against Casey's General Stores, Des Moines, on behalf of Iowa petroleum marketers in towns of 5,000 people or less in December 1990, charges that since 1987, the corporation sought to destroy competition by unfair or predatory pricing policies. The alleged predatory pricing caused two of the five plaintiffs to go out of business.

The crux of the suit is an allegation that Casey's subsidized its small market stores with profits generated by Casey's stores in larger markets, and with the profits from nonpetroleum product sales.

Casey's countered in May 1991 by filing for a summary judgment on the grounds that the U.S. district court lacked jurisdiction over the case and that the structure of the petroleum market did not permit successful predatory pricing.

But in Judge Charles Wolle's ruling, restrictions on discovery that had been previously ordered were lifted, and attorneys for the plaintiffs have been granted access to additional information needed to support their claim against Casey's.

"If gasoline margins are not sufficient to cover operating costs, local marketers and C-store owners in small towns will be driven out of business," says Del Nelson, of Dyno Oil Co., Spirit Lake, Iowa. "When local marketers close their doors in their communities, the public will be subject to the 'pricing benevolence' of large, nonlocally owned companies." npn



Is the Sun Setting on The U.S. Oil Industry?

The United States is a world power and an industrial giant mainly because of the pristine and abundant natural resources available for development primarily during the past two centuries. This includes petroleum, although its development has been concentrated in this century.

In all of history, 629-billion bbl. of crude oil have been produced in the world. Two to three times that amount is known reserves (1,053-billion bbl.) or believed discoverable (489-billion bbl.), ensuring oil a continuing place for a long time to come. The figures are from the U.S. Geological Survey.

In only five years, from 1985-'90, identified reserves increased by 258-billion bbl., 203-billion of them in the Middle East. Of these, 100-billion bbl. were in Saudi Arabia and 50-billion in Iraq. By 2010, more than half of the world crude production will come from members of the Organization of Petroleum Exporting Countries (OPEC).

That's the world picture. In the United States, because of public policy and sentiment, the petroleum industry is in decline and its future bleak, with the prime prospects off limits to oil exploration. Perhaps something will come along to shock the country into revising its present policies, but that is only conjecture.

Imports are rising ominously. Powers Petroleum Consultants, Houston, reports that U.S. imports in 1992 are 7.2-million b/d, or 42% of demand, requiring 14 su-

U.S. West Coast Oil Supplies, 1976-2010

Volume of Supply (million b/d)

Source	1976	1980	1990	2000	2006	2010
Alaska	0.2	1.0	1.5	1.0	0.7	0.5
California	0.9	1.0	0.9	0.8	0.7	0.6
Imports	1.0	0.4	0.2	1.1	1.6	1.9
Total	2.1	2.4	2.6	2.9	3.0	3.0

Percentage of Supply

Alaska	10%	42%	58%	34%	23%	17%
California	43	42	35	27	23	17
Imports	47	16	7	39	54	66
Total	100%	100%	100%	100%	100%	100%

Source: Bruce Wilson, from California and Alaska state data.

pertanker shipments a day. The firm forecasts that by the year 2020, the U.S. will import 17.8-million b/d, or 73% of demand, requiring 36 supertankers a day.

The reality is that the U.S. has chosen to relegate itself to the backwaters of one of the world's largest and most fundamental industries. The mass of people and their representatives don't seem to have gotten the message yet, or don't seem to care. Meanwhile, the U.S. oil industry gradually exports itself to the rest of the world.

Voice of 'despair'

The frustration of seeing this happen was expressed by Arco chairman and CEO Lodwrick M. Cook in a major speech in Los Angeles in April. He said government policies are driving U.S. oil industry jobs and investment overseas at an alarming rate and giving OPEC increased control over our oil supply and prices.

"Oil companies are leaving the United States because they've lost confidence in the future. They don't think they can make it here anymore," he said. "The signs of hasty departure are everywhere—the lack of working rigs, the decline of jobs, the fact that U.S. crude oil production has fallen by 1.3-million b/d since early 1986.

"In the oil industry, we can't wait 75 years to decide if we're wanted. We'll go where governments encourage us to explore—and a lot of countries are fighting to get this industry's expertise and capital: places like Russia and other newly emerging republics of the former Soviet Union.

"Overseas investment by U.S.-based oil companies has nearly doubled since 1986, growing from less than 30% of worldwide spending in the mid-1980s to more than 50% in 1990. Even large U.S. firms that have been traditionally tied mainly to the U.S., like Amoco and Phillips, are going. And so is Arco."

He added, however, that Arco still sees some prospects in this country, such as Alaska, California and onshore and offshore the Gulf of Mexico.

Cook reported U.S. petroleum industry jobs have dropped 17% since 1981, a total of more than 330,000.

The Arco executive said the U.S. Senate's recent decision to shelve legislation that would open a portion of Alaska's Arctic National Wildlife Refuge (ANWR)—the country's top prospect—to oil and gas exploration "truly symbolizes the industry's despair."

The reason is the environment, he said, but Arco and others have been producing on the North Slope, only a few miles from ANWR, for 15 years, with clean air, clear streams and thriving caribou.

Imported oil cost the U.S. more than $50-billion last year, far more than the country's entire trade deficit with Japan, Cook said.

The issue boils down to, "Do we want a domestic exploration and production industry? If we do not, then we're on the right path.... A defeatist philosophy has taken hold in this country [that says] trying to maintain our energy strength is too hard on our air, water, land and wildlife. So let's get the stuff somewhere else—until we can do away with it altogether.

"The American consumer wants to use petroleum products, but he doesn't want the crude produced at home—and he's not at all certain he wants it refined at home, either. In fact, he may not want any crude oil at all, or gas or coal or nuclear—just some wonderful form of energy that miraculously transports him from place to place, without having to go to the trouble of digging it up and refining it into something useful like gasoline or jet fuel."

West Coast view

In the West, oil has been abundant in California for most of this century and in Alaska since the mid-1970s, but without new discoveries, production is declining over all. As Alaskan production falls off in the 1990s, the seven western states will become dependent on oil imports, says Bruce Wilson, a fuels and transportation economist in Arlington, Va.

In a study prepared last year for the Coalition for American Energy Security (CAES), he predicts that without a major new oil discovery in Alaska, the Pacific Coast and adjoining states will become largely dependent on imported oil by 2010, when imports will account for 66% of their supplies. The study covers Alaska, Washington, Oregon, Nevada, California, Arizona and Hawaii.

Alaskan production displaced crude imported from the Persian Gulf, but that production has peaked and will drop sharply by the end of the century, Wilson says. Most of the oil that will supplant it will again come from the Persian Gulf.

California, Nevada and Arizona will be 50% dependent on imported oil by 2000, and Washington and Oregon will be 66% dependent by then. Hawaii, which obtains 40% of its oil supplies from Alaska, will become totally dependent on foreign oil by 1996, he says. Alaskan crude hasn't been greatly used in Hawaii because its two refineries are engineered to process high-gravity, low-sulfur overseas crude.

The future is perhaps even bleaker because the crude oil pipeline that crosses Alaska will have to shut down prematurely if another major North Slope field is not discovered in the next six or seven years, reports the U.S. Dept. of Energy (DOE). The only oil prospect believed to be of this size is the ANWR, which is currently off limits.

The DOE study, done in cooperation with the U.S. Dept. of Interior and Alaska, considers 600,000 b/d the minimum practical throughput of the Trans Alaska Pipeline. (The pipeline is running 1.6-million to 1.8-million b/d now.) Below that the oil will cool and get thicker, causing wax formation. Only costly mechanical revisions in the line and pump stations could solve the problems. With declining production, such revisions wouldn't make economic sense. The shutdown point is considered 300,000 b/d.

DOE concludes that unless new large ANS oil fields are developed, the pipeline will likely shut down in 2009, leaving as many as 1-billion bbl. of recoverable crude behind, a loss that can only be made up by increasing imports.

The Interior Dept. estimates there is a 46% chance of discovering economically recoverable oil on the coastal plain of the ANWR—possibly as much as 9.2-billion bbl., or 1-million b/d for 20 years or more. The American Assn. of Petroleum Geologists believes the ANWR could hold 15-billion bbl. of recoverable oil, or 33 years of production.

These ponderables and imponderables paint an uncertain and often depressing picture. What is certain, however, is that the U.S. is moving rapidly to greater dependence on foreign oil and the insecurity that goes with it. The consequences could be, perhaps inevitably, military.

Arco's Cook asks, "Do we want an energy policy...that makes sense, that balances domestic petroleum production against imports and prevents us from putting all our eggs into OPEC's basket? Or do we want to go to war every time the oil supply lines are threatened?" npn